

MICHIGAN FARMER

AND STATE JOURNAL OF AGRICULTURE.

HOBBS BROTHERS, Publishers.

DETROIT, MONDAY, FEBRUARY 13, 1898---WITH HOUSEHOLD SUPPLEMENT.

PRICE \$1.50 PER YEAR.

VOLUME XIX.

"PRACTICE WITH THEORY AND SCIENCE!"

NUMBER 7.

CONTENTS.

Agricultural—Oakland County Shorthorns—The Schoolcraft Institute—Cost of an Acre of Oats—Calhoun County Sheep-Breeders—Our Illustration—Michigan Crop Report—Feeding Ensilage or Silage—Reform—Suggested—Over-Stocking Cows at Exhibitions.....	1
The Horse—Lucerne for Horses—The National Trotting Association—Horse Gossip.....	2
The Farm—The Cost per Acre of Wheat, Corn and Oats—Foreign Potatoes for the United States—Agricultural Items.....	2
The Poultry Yard—Why Young Turkeys Die.....	2
Horticultural—Celery Culture—Hints in Destroying Certain Insects—Peach Trees from Pisa—Culture of Raspberries—The Acid of Fruits—Felling of Timber—The Round-Headed Apple-Tree Borer—Horticultural Notes.....	3
Apianian—Bee Cellars.....	3
Editorial—Wheat—Corn and Oats—Dairy Products—Wool—Live Stock in the United States—Suggests an Easier Way to Hang Up Hogs—Free Trade for All—From an Indiana County Farmer—Stock Notes.....	4
News—Summary—Michigan—General—Foreign.....	4
Poetry—A Plea—Spiritual Companionship.....	6
Miscellaneous—A Pair of Weddings—A Charity Patient—Bolling Cloth from Switzerland—Recollections of Jenny Lind—The Man who Knows It All—A Vanishing Idea—The Lion's Supper—Wit and Wisdom of Pretty Polly—The Joker Outrigger—The Origin of Phrases—Cooling Off All the Time—Varieties—Chaff.....	7
Veterinary—Probably Worms—Probably Chronic Laminitis—Abscess on Fetlock—Wound in Hook Joint.....	8
Commercial.....	8

Agricultural.

OAKLAND COUNTY SHORTHORNS.

The Herd of the Late James Moore of Milford.

This herd was started when Shorthorns were not as plenty in Michigan as at present, and when breeders had hard work to make farmers and feeders believe in the value of improved stock for practical use. It has grown up from a small beginning, and is largely composed of animals bred on the farm. The foundation animals came from some of the best herds of the country, and include Princess, Craggs, Fennell, Duchess, Rose of Sharon, Young Mary, and Red Rose. The herd now numbers over 40 head, and the bulls used have been for a number of years past, of Princess and Craggs blood. The Son of 4th Duke of Northumberland 47097, bred by the A. M. Winslow's Sons, Kankakee, Ill., was at the head of the herd for some years. He was followed by the young Craggs bull Gloster Wild Eyes 59239, now at the head of the herd, and a large massive red bull, four years old. He is in many respects a first-class Shorthorn, and in the prime of his usefulness. A better shaped head and horn, a cleaner jaw and finer muzzle is seldom met with. He has a massive neck and shoulders, wide between the fore-legs, and a square brisket. He is good in the loin and flank, has a deep quarter, and is excellent in the twist. As to constitution he looks as sound and tough as a fine knot.

In the herd are some fine cows, the Duchess of Gloster and her daughters being extra good. There are three Princess heifers of the Lady Sale branch of that family, and Mr. Moore thinks that for milking qualities the family leads all others. There is an extra good Rose of Sharon heifer and a Belle Duchess (Elbert or Fletcher), a daughter of a fine show cow Mr. Moore purchased in Ohio, which is a typical Shorthorn of the best sort. All of this family in the herd show up well, and keep up the high quality of Mr. Moore's original purchase. There are also some Young Marys in the herd and single individuals of other families, but those we have mentioned constitute the bulk of the herd in numbers.

The herd has been managed by a herdsman since Mr. Moore's death, but under the supervision of Mrs. Moore herself, who not only has a quick eye and a strong admiration of a good Shorthorn, but is also a student of Shorthorn history, and seems perfectly competent to manage the herd in a manner to continue and even add to its usefulness and reputation.

In the herd at present are a few young bulls for sale, well worthy of the attention of those who are in want of such stock. They are all sired by Wild Eyes Gloster, of good color, and evenly marked. In fact that bull seems to mark every one of his calves after himself, straight reds. A few of the young females of the different families will also be sold so as to keep the herd down to a size suited to its surroundings. But the herd as a whole will be kept up, and every endeavor made to add to its character, and Michigan may yet have a Shorthorn breeder in Mrs. Moore who will rival the success of Mrs. H. C. Meredith, of Cambridge, Indiana.

The State Horticultural Reports.

DETROIT, Feb. 4th, 1898.
To the Editor of the Michigan Farmer.

Where and how can I get the last report of the Michigan Horticultural Society? Answer through the Farmer.

O. W. HAYNES.
[Enclose 18 cents postage to the Secretary, Mr. Charles W. Garfield, Grand Rapids, with request for a copy, and it will not doubt be forwarded at once.—Ed.]

The Frankenthom cheese factory made 110,000 pounds of cheese during the season, all of which was sold in East Saginaw. One hundred and eleven farmers patronized the factory, and they received \$16,538 for the milk furnished.

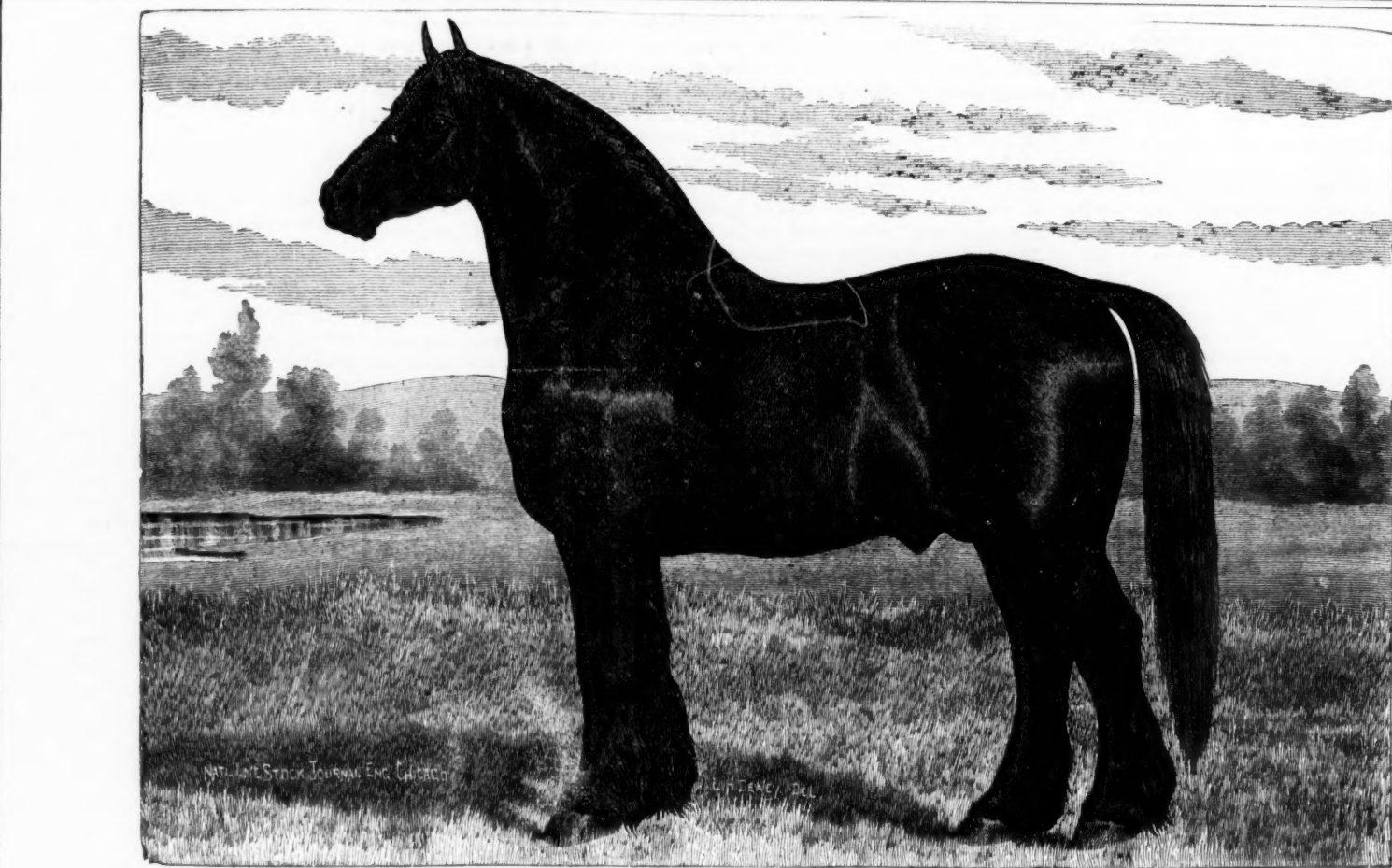
THE SCHOOLCRAFT INSTITUTE.

The Kalamazoo Husbandman's Club, whose annual institute was held at Schoolcraft the first week in February, is more fortunate than many other such organizations, to include many other local centers in the county, at which such a meeting can be made a success, even though only local talent be employed; but when both the traveling and the weather are so exceptionally fine as on the week of this meeting it must be expected that all these centers of agricultural wisdom will send representative men to converge upon the attractive point. Cooper sent Ingerson and Stoddard, the first a great admirer of Shorthorn cattle, and the latter a Berkshire hog specialist. Snow and Lusk, of Oshtemo, were there, both quiet but observing men, so uniformly full of practical ideas that they never stop over, who take tapping to start the irrigation. Richard has the men, but it was too far cross lots for them to appear. A. C. Towne, who heretofore has always come loaded, was indisposed, and had to remain at home. Jones was probably carrying "Corn King," his model Poland-China, or preparing in some way to impress the desire of spring custom-ers with a desire to invest. Constable allowed Thos. B. Lord to come again, although the whole community must have felt the collapse at his departure. He brought a satchel full of the "Farmers' Guide," and scattered yellow doggers about headed "Read and Reflect." In these he assumed to teach erring farmers, for ten cents, how to enrich their lands, and suddenly become bloated barn owners. The chairman of farmers' institutes ought to come prepared with some sort of squelching machine, with a patent stopper, and apply it to fertilized politicians, ready to go to seed, but with a consuming desire to sprout again, to fozzled cranks, and to agricultural lunatics generally. Galeburg and Augusta sent representative men. Marhoff from the former place has served as President of the Club, is up, mentally, on all questions pertaining to agriculture, and takes a physical stand while the subject is pending. Towne, of Augusta, is less aggressive; but his wife's opinions are given and are desired on all germane topics. Climax sent a score or more of good men. Vicksburg was well represented. D. T. Dell, the immitable and unapproachable President of the Club, resides at the latter town. He handles well all the reins that control or restrain, and manages the levers of force and action with a masterly hand. No part of the programme is slighted; no person ignored. When the time is up, the work of the hour is completed. He has the stamina to say "thus far and no farther," and the tact to lead out of interest to a dry topic. Strong, of Kalamazoo, is the Club's strong Secretary. He is the oracle on all abstruse points. If an experiment or illustration is wanted, he has the extract in his pocket-book. He knows the size of the medieval horse, and the diameter of any given fixed star. He can talk learnedly of evolutions, air currents, and cloud strata, and if one should call upon him at his farm, on a favorable evening, he could point, through his telescope, to all the pleasant paths and fields among the stars. The citizens of Schoolcraft made adequate provision for such a gathering, although the large hall was filled to its full capacity. The ladies of the Methodist Church, who furnished dinners for those attending, made \$500, showing that the patronage from a distance was large. Addison Brown, President of the village and son of the veteran pioneer, farmer and legislator, E. Lakin Brown, made a model welcoming address. It contained no fulsome flattery, nor redundant verbiage. It was strong in language pertinent to the occasion, and might well be patterned after by older men. The response by President Dell, well received.

The first paper on the programme was by J. W. Kirby, on "Preserving our forest timber." There seems to be no new department in the arguments put forth on this topic. It is the usual plaint of the destruction of the forests, and the presumed bad effects resulting from their downfall, yet there are very few farmers who would wish any part of their cleared fields again in timber. They prefer to take the chances of recurring fruitful seasons, notwithstanding the dourous portents predicted. The paper was a good exposition of the stock arguments usually adopted. The discussion turned upon climatic effects, and the preservation of young trees. It was stated rain storms were born of currents that started on the mountain slopes and ran along a mile high or more, and that no barrier one hundred feet high, either of forest or of hills, could banish or beckon the rain. There was no question but that timber was a protection against the wind, but a shelter belt of orchard or evergreen wind-break was as effectual. Trees set too thick along the highway shaded the road too much to allow the wind to dry up quickly, especially on prairie or clay soil. Hodge rows were some protection to fields of wheat in certain seasons, but they starved out every other plant for a space four rods wide every season, and they cost, in this way, more than they are worth. We cannot afford to save the old trees, for they are fast going to decay, but the young timber ought to be preserved. Ash, maple and wild cherry were recommended to grow for profit.

How to make raising hogs pay in Kalamazoo County, was essayed by Lucien Stoddard. Among the nuts for him to crack at the close was this "How many pounds of pork will a bushel of corn make?" L. B. Lawrence, of Little Prairie, had experimented in that direction. At one time, hogs turned on clover with all the corn they wanted made 13 pounds to the bushel of corn, but an average of 10 pounds is all that can be counted on, and when hogs bring \$5 per 100, the corn is sold at 50 cents per bushel for the growth made by the corn, and puts them in a condition to furnish a profit on the cheaper previous growth.

Mr. Marhoff had fed some low grade flour at \$20 per ton, mixed with bran, and his hogs grow finely and fattened well.



English Shire Stallion, Lord Byron 329 (4543); imported and owned by Geo. E. Brown & Co., Aurora, Kane Co., Ills.

Mr. Hayden evidently struck a popular chord for there was no opposition to the spirit of the paper, and little discussion followed.

Your correspondent read a paper on "How best to expend the highway tax" which will be summarized in an article soon to appear in the FARMER.

The business meeting and election of officers occurred in the afternoon, and resulted in continuing the old incumbents. "The present school law" was an inquisitorial discussion, with Professor Ashley Clapp, of Vicksburg, upon the platform to fire at. He stood his ground well, and seemed invulnerable at some points, but was doubtless glad when he was let loose.

The evening session was crowded to hear Dr. J. S. Morton on "The sanitary principles and conditions of a farmer's home surroundings and habits." Seldom do farmers have the privilege of listening to a finer and more eloquent and instructive address. It was lengthy but exceedingly interesting. It was followed by a poem by Miss Anna L. Fellows, of Schoolcraft, which captivated the entire audience, and rounded out the evening's entertainment very symmetrically.

OUR ILLUSTRATION.

Importers and breeders of Shires may feel encouraged at the outlook for these noble horses. They have grown gradually in public favor in the United States for 14 years; rapidly during the last five; and they have gone ahead with a rush the last two years, carrying everything by storm, having won first prize at every prominent show throughout the west where they have come in competition with other draft breeds. At the Chicago Fat Stock and Horse Show they have won first for three years in succession. For two years it was won by Geo. E. Brown & Co's Holland-Major (3135), and was open to the world for draft horses of any breed.

The reason why the Shire impresses every practical horseman favorably at a glance, and bears a critical examination, is because of his nicely-balanced proportions, together with his wonderful bone and muscular development. There is no surplus or useless weight about him—every pound being available, and every part in proper proportions. We refer our readers to the picture of Lord Byron which appears in this issue. It will bear more than a passing glance.

How many times we see heavy horses whose weight is a positive disadvantage to them; for the reason that their bone is too light and muscle and sinew deficient. So that appear to have strong legs will not bear close inspection; for the bone is found to be round and covered with meat instead of being backed by sinew. This fault is rarely found in the Shires. Their legs are not only large, but the bone is flat and dainty in quality, and the sinew well-defined and not hidden by fat or flesh.

A well-bred Shire has a clean, bony head; prominent, bright eyes; neck well set on massive shoulders and carried high; and rising gracefully from his withers; the body is deep, ribs well sprung, loin strong, quarters long and carried well out to the tail, and not drooping; thighs heavy and extending well down to the hock—a point where many horses are deficient. They vary in weight from 1,600 to 2,000 lbs.; the larger ones measure from 11 to 12 inches below the knee and 14 inches below the hock. Their feet are exceptionally good. English breeders are compelled to be particular about this point, for a poor foot could not stand the stone roads of the country nor the granite pavements of the city.

No other horse has a more hardy constitution or greater natural energy than the Shire, and it is these qualities that are bringing him to the front. They are worthy of the careful attention of all breeders of heavy horses for practical purposes. They are commanding high prices in the eastern cities and in the lumber regions.

MICHIGAN CROP REPORT.

The Michigan monthly crop report for February was issued on Friday last. The report is compiled from 899 reports, representing 674 townships. Wheat suffered no injury in January, the ground being covered with snow averaging a depth of eight inches in the southern and twenty-seven inches in the northern counties. The condition of live stock is slightly below the average.

Reports of wheat marketed at 284 mills and elevators in January make an aggregate of 547,400 bushels. The total amount of wheat reported marketed for the six months from August to January is 3,938,040 bushels, or 28 per cent of the crop of 1887.

The report also gives the State apianian statistics for 1887. The number of colonies of bees in the spring of the year was 41,889, a loss of 13,700 in wintering. The number of pounds of comb honey produced was 1,218,016, and of extracted honey, 253,213, and of wax, 9,271 pounds.

FEEDING ENSILAGE OR SILAGE.

The proof of ensilage, like that of the pudding, is surely in the eating. Many wise men have ignored this fact, and their own and all human experience, in discussing this silo question. What physician does not know the oft times wonderful effect of a little iron given to his patient. Pallor gives place at once, as if by magic, to the ruddy glow of health. And with this change weakness and lassitude are replaced by strength and energy. How often too we find that a little acid or some special food seems to renovate our whole digestive machinery, so our food digests, and we feel like new men. Now it was not that this medium of food was more stoutly nutritious, or had more of the carbohydrates, etc., but it touched the spot. The expert cattle feeder recognizes the fact that his cattle, indeed all his stock, are in this respect like himself: A few apples, potatoes, or roots remove the capricious appetite of an ailing cow or horse. We feeders have long wished we could have a winter ration that would give the relish to appetite and mellowness and gloss of skin and hair that the rich grass pastures of June always produce. This is why the English have valued roots so highly, and why all of us who keep nice stock would have to raise or grow roots, could we not do better.

In ensilage or silage, a shorter and so better word, we have this better substitute. It brings the gloss and vigor of good pasture, and enables us to keep nearly if not quite double the stock, thus adding to the fertility of our soils, and the contents of our pocket-books.

My silo had five acres of corn put into it. It was not nearly full—there being only 42 tons put in. I commenced feeding this to all my stock about December 1st, giving in two or three days after commencing what they would eat up clean, once a day. The silage was only half a little, just at the top and at the edge—even this did not smell or taste bad, though it seemed tasteless and lifeless—was so sweet that one entering the barn would not know that there was any silo in it, and was relished greatly by all the stock; sheep, horses and cattle, from the very first. In the morning all the stock was fed cut corn fodder—what they would eat—upon which was placed for large cows in full milk four quarts of meal—equal parts oats and corn with cobs. The cut stocks were moistened and the grain turned on. For three weeks a very little timothy hay was given at noon, since which the ensilage and cut stalks with the four quarts of meal—less, if course, with young animals and sheep—has formed the entire feed, if we except a little straw they munch, while out on warm days about the straw stack. Now I have twenty head of cattle, ten horses and about fifty sheep, yet the silage February 1st was only about half gone, and I am sure my stock never looked better than now. I am fully persuaded that twenty acres of corn silage would keep my entire stock well, whereas I have usually had nearly as much as this of corn, as much oats as corn, and as many acres of hay.

After feeding four weeks a two-year-old heifer sucking a calf was fed on silage alone; she would take about fifty pounds a day. It will be remembered that corn and all was cut and placed into the silo. For the month of January this heifer increased 1 1/4 pounds per day and her calf increased 2 1/4 pounds per day for the same time. My brother and hired men all remarked on the improved condition of this heifer. I believe all my stock would have done better could I have treated them in the same way. I had not enough silage to do so; but I shall soon have in the future. My sheep, and especially my culling fall colts show the excellence of silage. My brother, a few days since, took silage and very green, bright timothy hay

and placed them side by side in the manger of several of the cows. The cows of course had not had hay for several weeks but had had silage daily. They all at once commenced to devour the silage but paid no heed to the hay. The hay was then replaced with meal, when to our surprise and wonder they still kept to the silage. I tell you this appetite for silage tells volumes. The chemist's analysis is nowhere compared with it. It says I know what fills the gastronomical bill. It is silage.

In feeding this silage it is raked each day from the top. There is no freezing, moulding or trouble of any kind.

A gentleman—a very conservative man—who has watched my silo from first to last, a man who has never run in debt even at the grocery, not a cent, startled the Maple River farmers' club at its last meeting. He was asked: You have seen the silo, what do you think of it? I think I should build one this coming season, even if I had to run in debt to do it. I tell you, Mr. Editor, while I do not believe in the farmer's contracting debts, I do believe that any farmer who builds a barn and omits the silo makes a stupendous blunder. Michigan ought to build 1,000 silos next summer.

A. J. COOK.

A REFORM SUGGESTED.

CLARKSTON, Feb. 2, 1898.
To the Editor of the Michigan Farmer.

I think a little reform is demanded in the country in the matter of having the thills, or shafts, of a cutter centering one runner, and the horse thus being compelled to travel in front of that runner, frequently having it strike against his heels. The day has arrived when nearly every man has a cutter, and two-thirds of the travel on our country roads are single shafts. Now, place the shafts directly in front of the cutter and the horse will travel in the center of the road, where he should, and it will do away with the big ridge in the center of the road which would make it better for both double and single travel. It would look very awkward to have the shafts center the near front wheel of a buggy, and they are just as much out of place on a cutter. It would be difficult to accomplish this the present winter, but next winter let every man place the shafts of his cutter squarely in front of it and see what a nice effect it will have upon the roads.

P. H. SMITH.

The idea of placing the shafts of a cutter centering one runner was undoubtedly first adopted to enable the single horse to have the benefit of a beaten track to travel over. There does not seem to be any other reason for it, and as the greatly increased travel keeps the roads well beaten, there is no longer a necessity for it. Besides, as Mr. Smith suggests, the placing of the shafts squarely in front of the cutter will keep down the unsightly and sometimes dangerous ridge in the center of the road, which makes it difficult to turn out when passing a team. We see no reason why this reform could not be carried out with good results to all concerned. It is only custom and prejudice which make the present style of drawing a cutter general. Besides, we believe the horse would travel with more ease and not have his heels hurt by the runner striking against them. Who will be the first to put the idea to a practical test?

Over-Stocking Cows at Exhibitions.

Amongst the many vicious practices which we see creeping into our leading exhibitions may be mentioned the growing habit of permitting cows to remain un milked for 24 to 36 hours before leading them in the ring to be judged. Under all circumstances, the objects are mercenary, and the agony inflicted upon the victims is often intense. It is one of the basest forms of cruelty to animals, predisposing the sufferers to many forms of disease, and condign punishment should be meted out to the owners. If the cow is for sale, the object is either to give her the appearance of being a good milkier, or, if she has not recently calved, to make her appear to maintain her flow for a considerable length of time. If a prize or reward is the object, then the exhibitor hopes to influence those judges who are really sensible enough to think that the yield of milk has something to do with the merits of the animal. Some judges are somewhat squeamish about the contour of the udder, and the overstocking inquiry is a sort of cheap bribe for them.

If this obnoxious practice is not speedily brought to a halt, it will give rise to deleterious consequences not yet dreamed of. Many of the most disastrous inequities of our day have had smaller beginnings than this. Special methods of feeding, drenching and drugging have been discovered, which unnaturally and abnormally increase the milk secretion for such purposes, and in some instances the innocent sufferers have been known to remain for weeks under such treatment without milking, thereby causing serious and permanent injury to the udder.—Farmers' Advocate.

A KANSAS farmer says: "I have less than one square rod of strawberry plants, which I surface-dressed with ashes and manure in the fall. It yielded all the berries desired for family use, and I sold forty quarts besides. I set out twelve plants of the Lawton black-third year they yielded more fruit than could be used in the family." This shows how simple a matter it is to secure a supply of small fruits for the home table.

NEW ADVERTISEMENTS

NEW ADVERTISEMENTS. NEW ADVERTISEMENTS.

The Very
LATEST
AND
BEST

THE BEST
HARROW OF
CULTIVATOR
MADE.

Established
1854.

BUCKEYESPRINGTOOTH
CULTIVATOR

Many Farmers love level Cultivation for corn, and there is a demand for a Combined Corn Cultivator and Harrow or Fallow Cultivator. This we have accomplished in the machine represented by the cut. It is attached to our regular Cultivator Frame. Without the center wheel it is a complete Corn Cultivator and with the center attachment it is a perfect Fallow Cultivator or Harrow.

ALSO MANUFACTURERS OF
Buckeye Drills, Seeders, Hay Rakes, One Horse Cultivators, Walking and Combined Cultivators, Cider Mills, Etc.

P. P. MAST & CO.
SPRINGFIELD, OHIO.
BRANCH HOUSES.

Philadelphia, Pa. Kansas City, Mo.
Peoria, Ill. Omaha, Neb.
San Francisco, Cal. St. Paul, Minn.

THE old plaster off walls is good for poultry; it supplies the necessary lime.

It is no great wonder that New Jersey farmers find profit in the poultry business. They make their hens lay in winter and get 45 cents per dozen for the eggs.

A CORRESPONDENT of the *Rural News Yorker* says: The best and safest way to pack eggs for shipping is to use small, light baskets with handles. I first place hay seed or oat chaff in the bottom—fine hay will do—on this I put a layer of dry sawdust, then every egg is wrapped up carefully in light tissue paper, so as not to come in contact with the sawdust, which has a tendency to get damp and stop the pores of the egg. On this I place a layer of eggs, so as not to touch each other. On this I place more sawdust. When the basket is nearly full, I fill up with fine hay, over which I fasten tightly a piece of drilling or canvas, to keep the eggs in their place and prevent jarring.

E. J. BROWNELL, well known poultry raiser, says: My hen house is detached from all other buildings, and so I can safely adopt the following plan for destroying and keeping clear of vermin. I prepare a swab at the end of a stick four or five feet in length, and saturating this with kerosene sprinkle it over with all the flowers of sulphur that will adhere to it; then lighting it I scorch the roofs and sides of the building with this flame, applying it directly to every part I can reach. By means of this treatment, occasionally removing and burning the old nests and scorching the nest boxes—which should always be made movable so that they can be taken out for this purpose and scorched with a fire made of straw-shavings, or some other light material—I succeed in keeping clear of lice with comparatively little trouble.

There is more experience, time, and brain work represented in the preparation of Hood's Sarsaparilla than in any other medicine. It is this which makes Hood's Sarsaparilla peculiar in its curative power, and the remarkable cures it effects. Give it a trial.

P. M. AUGER tells us the right kind of manure as well as the quantity necessary, can only be ascertained by experiment. Cases of over-manuring are rare, and there is little danger of plants or trees suffering from this source. Anything that helps the health and vigor of the plant will help the yield and quality. But we must be careful not to let

NEW ADVERTISEMENTS.

NEW ADVERTISEMENTS:

C Paine's clery

Celery Compound

**For The Nervous
The Debilitated**

CURES Nervous Prostration, Nervous Headache, Neuralgia, Nervous Weakness, Stomach and Liver Diseases, and all

AS A NERVE TONIC, It Strengthens and Quiets the Nerves.

AS AN ALTERNATIVE, It Purifies and Enriches the Blood.

AS A LAXATIVE, It acts mildly, but surely, on the Bowels.

AS A DIURETIC, It Regulates the Kidneys and Cures their Diseases.

Recommended by professional and business men.
Price \$1.00. Sold by druggists. Send for circulars.
WELLS, RICHARDSON & CO., Proprietors,
BURLINGTON, VT.

RIVERSIDE STOCK FARM!

Horse

"DEGEN BROS., OTTAWA, ILL.,
Importers and breeders of
Percheron, Belgian Draft, and French Coach Horses.
We have now over 150 head of imported Percheron
stallions and mares on hand. Our importations this
year have been selected from the best breeding districts


Our French, our Belgian and Dutch horses are all of the best quality, and are bred in France, Belgium, and recorded in Belgium and America. Our stock is all recorded in France and in America. Our French Coach horses are the best that could be found in France. We will be pleased to show our stock to visitors. Correspondence invited and promptly answered.

d26-16t

THE HOME AND HEADQUARTERS
FOR ALL KINDS OF
BRITISH HORSES

BRITISH HORSE S.
Royal Society Winners in Each Breed.

CALBRAITH BROS.,
OF JANESVILLE, WIS.,
have imported during the
present season over **200**
STALLIONS including



CLYDESDALE,
ENGLISH SHIRE,
SUFFOLK PUNCH,
HACKNEY

AND CLEVELAND BAY HORSES.

More prize winning, high class stock, imported by us than any three firms in America.

Superior horses, fashionable pedigrees and all guaranteed good breeders. Prices and terms to suit everybody. Visitors cordially invited. Send for

CALBRAITH BROS.,
Janesville, Wisconsin.

THOMPSON'S WHEELBARROW SEEDER
THE ORIGINAL OF ALL.
and WITHOUT A RIVAL in the Field. NEVER EQUALLED.

Sows Clover, Timothy, Red Top
and all kinds of Gram Seeds,
ANY AMOUNT TO THE ACRE,
EVENLY and ACCURATELY.
20 to 40 Acres can be sown in a day.
LIGHT. STRONG. SIMPLE.
Weights 35 lbs. complete.
O. E. THOMPSON,
YPSILANTI, MICH.

Send for Circulars.

WINDY WEATHER DOES NOT AFFECT SEEDING.

WARM WATER FOR STOCK **THE DECATUR TANK HEATER!**

STOCK FEEDERS AND DAIRYMEN, who have used it, state that it is worth \$1.00 per day to have it; if it saves time spent in chopping ice, and keeps the stock in better condition. It is absolutely certain and will last many years. It requires no other care than to be filled with coal once a week. Prices favorable. Apply for descriptive circulars.

FAIRBANKS, MORSE & CO., CHICAGO, ILL.

**A SPINWALL
POTATO
PLANTER.**

Absolute Guarantee given to do
PERFECT and RAPID WORK.

Write for illustrated circular, mention this paper,



SPINWALL MFG. CO.
THREE RIVERS, MICH.

**BETTER
THAN EVER.**

PLANTS CORN
Distributes Fertilizers
SPINWALL MFG. CO.
THREE RIVERS, MICHIGAN.

PHOSPHATE SALT **FOR SPRING CROPS**
Write for Circulars and Prices on
Car Lots at your Railway Station.
TREATISE ON FERTILIZING,
FREE. Address **E. S. FITCH, Bay City, Mich.**

NORMAL, ILL.
French Draft and
Percheron Horse
CENTER OF AMERICA

7 model barns surround the depot; 23 barns and farms representing over



15000
Machines in actual use
testifying to its merits.

Can be carried into field and attached to Mowing
Machine Wheel. New Descriptive Literature Free.
HICCANUM MANUFACTURING CORPORATION,
Successors to R. B. ALLEN & CO.
189 Water St., N. Y. Main Office, Hingham, Conn.

15000

1,000 Imported

to all agents (Registered in France and America). **First-class stock, strong competition, and reasonable prices** should induce everyone to visit the French-horse city of McLean county—the France of America—before leaving elsewhere. Address each of the undersigned firms.

E. McNaught. Dillon Bros.
Kemp & Lowrey. Dillon & Bright.
C. M. Moats. J. F. Trimmer.

Normal, Ill., is located at crossing of Chicago & Alton.

The EUREKA
will save one-half your labor in the hay and mowing season. **BETTER HAY, NO TEDDING,** will handle the larger size. The increased demand for hay is the merit. See the Eureka in the Catalogue. Mention this paper. Address **EUREKA MOWER CO., Utica, N. Y.**

ton and Illinois Central R. R. 15-minute street cars
to and from Bloomington depots.

Best Steel WOVEN WIRE FENCING
Wire Rope Selvage
McMULLEN'S



McMULLEN'S

j1606411

Patented Nov. 24, 1885
RICHMOND CHAMPION FENCE MACHINE



It is the only machine using wire cable for tension. It can use heavier wire than any other machine made. Can make force from two to six cables. Can make a pocket 4 1/2 inch in diameter, or a board 12 inches wide without changing the machine in any particular. For special prices, circulars, etc., write for them.

30c. to \$2 per rod.

All sizes and widths. Sent by express or any other carrier in this line of products. **FRIGID** is a registered trademark.



Write **THE MCWILLIEN WIRE WORKS FENICO, CO.**
125 & 140 West Lake in CHICAGO, ILLINOIS
J. McWILLIEN

CHAMPION RAILING PRESSES

CHAMPION GREYERY

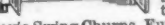
Awarded FIRST PRIZE at the Great International Live Stock Exposition, St. Louis 1893.
 Draw a milk or cream and we deposit the BEST CREAMERY of the class on the market. One at wholesale price value.

Address FAMOUS MILK CO., Quincy, Ill.
 1893

 **LABEL** 

Dunn's White Metallic Ear Marking Label, stamped to order with name, or name and address and numbers. It is reliable, cheap and convenient. Send us eight or give perfect satisfaction. Illustrated Price-List and samples free. Agents wanted.

DAIRY IMPLEMENT CO.,
BElLOWS FALLS, VT.

 **BRADLEY W.F.G. CO.**
SUCCESSORS TO FURSTMAN & CO.

DAVIS SWING CHURN Dairies and no agents.
Wholesale and Retail. **DAVIS & SHIMMER BUTTER WORKS, NOBBLIT BUTTER PRINTERS, & CO.,**
BElLOWS FALLS, VT.



JUDICIOUS AND PERSISTENT
Advertising is the way to success.
successful. Before placing any
Newspaper Advertising consult
LORD & THOMAS,
ADVERTISING AGENTS,
45 to 49 Randolph Street, CHICAGO.
15 to 19 Randolph Street, ST. LOUIS.

MAKERS OF
**RELIABLE
FLOWS
CULTIVATORS
RAKES ETC.**

**CHICAGO ILL.
U.S.A.**

For a "BIG INJUN" 3-Wheel Sulky Plow
Address GALE MANUF'G CO., Albion, Mich.

TOBILIN PRINCE, Hersey, Sugar, Scrap Pictures, Agt's
Quilt & Hug, 10c. ELK & Co., Montevideo, Conn.
 D120CW136

MICHIGAN FARMER.
AND—
STATE JOURNAL OF AGRICULTURE.
GIBBONS BROTHERS
—SUCCESSORS TO—
JOHNSTONE & GIBBONS, Publishers.
No. 40 and 42 West Larned St.,
DETROIT, MICH.
Eastern Office: 21 Park Row, New York.
P. B. BROMFIELD, M'gr.
Subscribers remitting money in the office
will receive a favor by having their letters re-
turned, or by procuring a money order, other-
wise we cannot be responsible for the money.
CHARGE OF ADDRESS.
Subscribers wishing the address of the FARM-
ER changed must give the name of the Post-
office to which the paper is now being sent as
well as the one they wish to have it sent to. In
writing for a change of address all that is neces-
sary to say is: Change the address on Michigan
Farmer from Postoffice to Postoffice.
State your name in full.
MICHIGAN FARMER
DETROIT, MONDAY, FEBRUARY 13, 1888.
This Paper is Entered at the Detroit Post-
office as second class matter.

WHEAT.
The receipts of wheat in this market the
past week amounted to 37,734 bu., against
60,154 bu. the previous week, and 48,950
bu. for corresponding week in 1887. Ship-
ments for the week were 1,001 bu. against
753 bu. the previous week, and 1,028 bu.
the corresponding week in 1887. The stocks
of wheat now held in this city amount to
1,352,864 bu., against 1,139,073 bu. last week
and 1,372,968 bu. at the corresponding date
in 1887. The visible supply of this grain on
Feb. 4 was 41,096,654 bu. against 41,701,031
bu. the previous week, and 41,770,031
bu. for the corresponding week in 1887. This
shows a decrease from the amount reported
the previous week of 674,438 bushels. As
compared with a year ago the visible sup-
ply shows a decrease of 30,008,947 bu.
Sales during the past week total up 3,194,-
000 bu. of spot and futures against 1,921,000
bu. the previous week. The market has
ruled weak as a general thing, notwith-
standing a fair demand for both spot and
futures. Cash wheat is 1/4c lower than
a week ago, but May futures have declined
1 1/2c in Detroit and Chicago, and 1/2c
in New York. On Saturday the feeling was
firmer, but did not respond to the re-
ports of other markets, which were gen-
erally higher than the previous day. There
has been a good export demand, and the
week closes with foreign markets all steady.

The following table exhibits the daily closing
prices of spot wheat in this market from
Jan. 21st to Feb. 11th, inclusive:

No. 1	No. 2	No. 3
White	Red	White
Jan. 21	87 1/2	86 1/2
22	87 1/2	86 1/2
23	87 1/2	86 1/2
24	87 1/2	86 1/2
25	87 1/2	86 1/2
26	87 1/2	86 1/2
27	87 1/2	86 1/2
28	87 1/2	86 1/2
29	87 1/2	86 1/2
30	87 1/2	86 1/2
Feb. 1	87 1/2	86 1/2
2	87 1/2	86 1/2
3	87 1/2	86 1/2
4	87 1/2	86 1/2
5	87 1/2	86 1/2
6	87 1/2	86 1/2
7	87 1/2	86 1/2
8	87 1/2	86 1/2
9	87 1/2	86 1/2
10	87 1/2	86 1/2
11	87 1/2	86 1/2

For No. 2 red the closing prices on the
various days each day of the past week were
as follows:

Day	Price
Monday	87 1/2
Tuesday	87 1/2
Wednesday	87 1/2
Thursday	87 1/2
Friday	87 1/2
Saturday	87 1/2

A single sale of No. 1 white for May de-
livery was made on Saturday at 89c.
One year ago No. 1 white wheat was sell-
ing at 82c, and No. 2 red at 81 1/2c. In fu-
tures No. 1 white for May was quoted at
84 1/2c, and No. 2 red for same month at 84c.
It is thought the visible supply will show
a further decrease in the next statement of
at least 750,000 bushels.

The demand for flour from Great Britain
continues good. Foreigners have also been
liberal purchasers of wheat in the New York,
Chicago and St. Louis markets the past week.

We direct attention to the State crop re-
port, especially the percent of the last crop
marketed. It seems incomprehensible that
so small an amount has passed out of the
hands of the buyers, especially when country
millers are purchasing wheat in this city
for shipment to interior towns.

The exports of wheat from Russia during
last year are reported as equal to about 66,-
000,000 bu., against 50,000,000 bu. in 1886
and 58,640,000 bu. in 1885.

The following table shows the quantity
of wheat "in sight" at the dates named, in
the United States, Canada, and on passage
to Great Britain and the Continent of Eu-
rope:

Visible supply	Bushels
On passage for United Kingdom	41,701,031
On passage for Continent of Europe	1,139,073
Total	42,840,104
Total previous week	42,770,031
Total two weeks ago	42,661,132
Total Jan. 29, 1888	42,661,132

Shipments of wheat from India for the
week ending Feb. 4, 1888, as per special
cable to the New York Produce Exchange,
aggregated 160,000 bu., of which 40,000
bu. were for the United Kingdom and 120,-
000 to the Continent. The shipments for
the previous week, as cable, amounted to
200,000 bushels, of which 150,000 went
to the United Kingdom and 50,000 to
the Continent. The total shipments from
April 1, 1887, which was the beginning
of the crop year, to February 4th,
have been 34,560,000, including 12,080,000
bushels to the United Kingdom, 11,880,000
to the Continent. The wheat on passage from
India Jan. 25 was estimated at 730,000 bu.
One year ago the quantity was 3,568,000 bu.

The estimated receipts of foreign and
home-grown wheat in the English markets
during the week ending February 4
were 426,000 bu. less than the estimated

consumption; and for the eight weeks end-
ing Jan. 31 the receipts are estimated to
have been 3,952,664 bu. more than the con-
sumption. The receipts show an increase
of 6,961,800 bu., as compared with the cor-
responding eight weeks in 1886-1887.

The Liverpool market on Saturday was quoted
quiet with moderate offerings. Quota-
tions for American wheats are as follows: No. 2
winter, 6s. 7d. @ 6s. 8d. per cental; No. 2
spring, 6s. 7d. @ 6s. 8d.; California No. 1
9s. 8d. @ 9s. 10d.

CORN AND OATS.
CORN.
The receipts of corn in this market the
past week were 839 bu., against 3,118
bu. the previous week, and 31,858 bu. for the
corresponding week in 1887. Shipments for
the week were 11,821 bu., against 15,999 bu.
the previous week, and 68,196 bu. for the
corresponding week in 1887. The visible
supply of corn in the country on Feb. 4
amounted to 7,817,070 bu. against 7,134,733
bu. the previous week, and 16,460,588 bu.
at the same date in 1887. The visible supply
shows an increase during the week indicated
of 682,337 bu. The stocks now held in this
city amount to 45,098 bu. against 56,631 bu.
last week and 88,640 bu. at the cor-
responding date in 1887. As compared with
a year ago the visible supply shows a de-
crease of 8,643,518 bu. Corn has ruled
dull but firm all the week, with values
practically unchanged since a week ago.
No. 2 is quoted at 51c. No. 3 spot
would bring about 51c. Receipts have
dropped to almost nothing, and stocks held
here are light. It is apparent that other
grains are being largely utilized for feeding
this year, or the price of corn closed 1/2c lower
than a week ago. Chicago corn closed 1/2c lower
than a week ago, spot No. 2 selling at 47 1/2c.
The market was moderately active in a
speculative way, with fluctuations in values
within narrow limits. In futures No. 2 for
March is quoted at 47c; for May at
51 1/2c, and for June at 50 1/2c per bu.
By sample corn sold there at 49 1/4c for No. 2
yellow, 47 1/2c for No. 3 yellow, 47 1/2c
for No. 2 mixed, and 47 1/2c for No. 3 mixed.

The Chicago Tribune says that the Grain
Dealers' Association has issued a report
showing reasons to believe that the corn crop
of last year in Illinois, Iowa, Kansas, and Ne-
braska was 94,000,000 bu. less than the Gov-
ernment estimate for those four States. The
document also says that the crop has been
marketed quite closely in many parts of the
area noted, and intimates that the supply of
corn on hand is really small for this time in
the crop year. Other advisers say that within
the last few days the corn on the Mississippi
bottoms north of Cairo has been well bought
up at about 53c by parties who want it to
send South.

The Liverpool market was steady with
fair demand on Saturday. The following
are the latest cable quotations from Liver-
pool: Spot mixed, 4s. 10d per cental;
February delivery at 4s. 9 1/2d; March at 4s.
9 1/4d, and April at 4s. 9d per cental. Val-
ues are about 1d. (2c) per cental lower
than a week ago.

OATS.
The receipts at this port for the week were
28,954 bu., against 22,074 bu. the previous
week, and 22,540 bu. for the corresponding
week last year. The shipments for the week
were 1,110 bu. against 873 bu. the previous
week, and 4,500 bu. for same week in
1887. The visible supply of this grain on
Feb. 4 was 5,402,708 bu., against 5,510,335
bu. the previous week, and 4,885,262 at the
corresponding date in 1887. The visible
supply shows a decrease of 107,569
bu. for the week indicated. Stocks held
in store here amount to 27,477 bu., against
20,005 bu. the previous week, and 10,707
bu. at the corresponding date in 1887. Oats
are dull and weak, and values have de-
clined. No. 2 white will not bring more
than 35 1/2c, per bu., a decline of 1/2c from a
week ago. No. 2 mixed are dull at 33 1/2c
per bu.; light mixed have not made a record
for a couple of days, so it is difficult to say
how they would sell. Receipts during the
past week were larger than usual, but stocks
held here are not heavy. At Chicago oats
ruled stronger than corn at the close of the
week, but prices are lower both for spot and
future delivery. No. 2 mixed are quoted
there at 28c per bu. for spot, 31 1/2c for May
delivery, and 31 1/2c for June. At New York
the week closed with oats higher than the
day previous and the demand quite good.
A considerable quantity was taken on Sat-
urday for export. Prices, however, are lower
than a week ago. Quotations there are
as follows: No. 2 white, 39 1/2c @ 41c;
No. 3 white, 38 1/2c @ 39 1/2c; No. 2 mixed, 38c
@ 38 1/2c. In futures No. 2 mixed for February
sold at 38 1/2c @ 38 3/4c, and May at 39 1/2c.
Western sold at 41c @ 41 1/2c for No. 2 white,
and 37c @ 37 1/2c for No. 2 mixed.

DAIRY PRODUCTS.
BUTTER.
The markets are in rather a mixed condi-
tion at present. While eastern markets are
dull and generally lower, at the west the
product rules firm, and in some instances
has improved in price. So far as our local
market is concerned, dairy stock of fine
quality is rather higher than a week ago,
while creamery is steady and unchanged.
Quotations range as follows: Fine pack-
ed dairy, 19 @ 20c; extra, 21 @ 22c; choice
dairy rolls, 18 @ 19c; medium to good dairy
rolls, 16 @ 18c; medium to good dairy rolls,
15 @ 17c; creamery, 26 @ 28c, the latter for
choice. The bulk of the receipts are rolls,
which are in better request than usual and
held firmly. At Chicago fancy Elgin cream-
ery is quiet, owing to lessened demand from
the east, where prices have declined. Fresh
dairies and rolls are in only moderate
supply and sell fairly well. Quotations are
as follows: Fancy Elgin creamery, 29 @ 31c per lb.; fine Iowa,
Wisconsin and Illinois do, 25 @ 27c; fat
to good do, 18 @ 20c; low grades, 15 @ 17c;
fancy dairies, 22 @ 24c; fat to good do, 17 @
20c; common and packing stock, 12 1/2 @
13 1/2c; roll butter, 14 @ 15 1/2c; grease, 7 @ 8c. At
New York the market has lost ground
during the week, and closes weak and
irregular. The N. Y. Daily Bulletin says:

"The course of the butter market has been
decidedly unsatisfactory the past week,
more particularly on creamery supplies, of
which have been excessive, and with stocks
of nearly all grades steadily accumulating,
prices have ruled weaker and irregular, es-
pecially those showing serious wintry de-
fects, and with holders anxious to sell some

grades are often offered 2 @ 3c apart in price.
Such a weak and falling market has been
scarcely any attention. Really fancy State
dairy tubs or tubs are in light supply and
stocks pretty well concentrated, with hold-
ers firm and confident in their views. Such
grades have a fair inquiry, but under grades
are tending to drag. Imitation creamery
has ruled slow and irregular in sympathy
with genuine creamery. Western dairy
very quiet and tone weaker. Factory butter
suffering more freely."

Quotations in this market on Saturday
were as follows:

Item	Price
Creamery, State, tubs	21 @ 23c
Creamery, State, fancy	21 @ 23c
Creamery, Penn. fancy	21 @ 23c
Creamery, good	21 @ 23c
Creamery, fair	21 @ 23c
State dairy, tubs, fancy	21 @ 23c
State dairy, tubs, good	21 @ 23c
State dairy, tubs, ordinary	21 @ 23c
State dairy, tubs, poor	21 @ 23c
State dairy, tubs, very poor	21 @ 23c
State dairy, tubs, no. 1	21 @ 23c
State dairy, tubs, no. 2	21 @ 23c
State dairy, tubs, no. 3	21 @ 23c
State dairy, tubs, no. 4	21 @ 23c
State dairy, tubs, no. 5	21 @ 23c
State dairy, tubs, no. 6	21 @ 23c
State dairy, tubs, no. 7	21 @ 23c
State dairy, tubs, no. 8	21 @ 23c
State dairy, tubs, no. 9	21 @ 23c
State dairy, tubs, no. 10	21 @ 23c

The Philadelphia market has ruled dull
all week. Only 475,000 pounds were sold
this week, as against 891,000 pounds last
week and 535,000 pounds for the correspond-
ing week last year. Holders, however, are
firmer in their views, and refuse concessions
in prices. Considerable business could
have been done had they been willing to
accept any reduction in quotations, but sell-
ers regard present values as being too low
to admit of further shading, especially in
view of strong markets abroad and holders
in the interior insisting upon prices above
those ruling on the seaboard. Stocks of de-
sirable fleeces in this market are light. Ohio
fine laines sold at 34 1/2c @ 35c, X Ohio at
30 1/2c @ 31c, Ohio medium clothing at 36 @
36 1/2c, and medium clothing at 38c. Un-
washed fine sold at 20 1/2c for heavy and 23c
for light, and fine Ohio fleeces with the de-
laine in them at 23 @ 24c.

The New York market is irregular, and
the record of business is not what it should
be. Values there are about on a par with
those ruling in Philadelphia, with buyers
demanding concessions. In its review of
the market the Daily Bulletin says:

"Business has a more or less uncertain
tone still as neither sellers on the one side
or buyers on the other are working in har-
mony among themselves, and negotiations
having made some fair contracts for goods
grading fine, choice or fancy. The differ-
ences, of course, are not radical, yet suffi-
cient to keep alive the same dissatis-
faction to some long noticeable and prevent a
healthy general market, with a probability
that some of the same sentiment may dictate
ill opinions become a little more fixed upon
the tariff question. There is, however, a
larger amount of business doing, both here
and in neighboring cities, manufacturers
having made some fair contracts for goods
and feeling the necessity of providing ma-
terial against the same, and while some ir-
regularity on values is now and then develop-
ed, the average of cost does not differ to
any important extent from the figures for
some time current."

The London wool sales are progressing
favorably for sellers. Wools suitable for the
United States are a shade higher, and the
bidding upon all desirable wools is active
and spirited.

LIVE STOCK IN THE UNITED STATES.
The February statistical report of the de-
partment of agriculture relates to numbers
and values of farm animals. There is a re-
ported increase in horses, mules and cattle,
and a decrease in sheep and swine. The
largest rate of increase is in horses, 5 per
cent, and it is general throughout the coun-
try, though largest west of the Mississippi.
The aggregate exceeds 13,000,000. The in-
crease in mules averages 3 1/2 per cent, the
increase in cattle is 2 1/2. It makes the ag-
gregate over 49,000,000. The increase
is nearly as much in milk cows as in
other cattle. In sheep the decline ap-
pears to be between 2 and 3 per cent, the
aggregate of flocks being about 43,500,000.
There is a smaller decline in numbers of
swine, less than 1 per cent, leaving the ag-
gregate over 44,000,000. The aggregate
value of all farm animals is \$5,000,000 more
than a year ago.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

and unwashed, and for pulled stock. The
movement in territory continues steady.
There has been some trading in Texas
wools, but stocks are getting cleaned up
quite close. California spring wool is meet-
ing with a fair request. Combining pulled
is sought for, but is scarce, as the receipts
have been lighter than usual. A liberal in-
quiry is reported for B supers. The sales
in that market for the week comprise 3,854,-
500 lbs of domestic fleece and pulled and
3,315,000 lbs of foreign, making the week's
transactions foot up 3,184,500 lbs, against
3,315,000 lbs for the previous week, and
2,433,000 lbs for the corresponding week
last year.

The current quotations at Boston, as
compared with those ruling a year ago, are
as follows:

Item	Feb. 11, '87	Feb. 10, '88
Ohio & Pa X	32 1/2c	32 1/2c
Ohio & Pa XX	32 1/2c	32 1/2c
Ohio & Pa XXX	32 1/2c	32 1/2c
Michigan X	32 1/2c	32 1/2c
Michigan XX	32 1/2c	32 1/2c
Michigan XXX	32 1/2c	32 1/2c
No. 1 combing	32 1/2c	32 1/2c
No. 2 combing	32 1/2c	32 1/2c
Texas spring, 12 months	32 1/2c	32 1/2c

The Philadelphia market has ruled dull
all week. Only 475,000 pounds were sold
this week, as against 891,000 pounds last
week and 535,000 pounds for the correspond-
ing week last year. Holders, however, are
firmer in their views, and refuse concessions
in prices. Considerable business could
have been done had they been willing to
accept any reduction in quotations, but sell-
ers regard present values as being too low
to admit of further shading, especially in
view of strong markets abroad and holders
in the interior insisting upon prices above
those ruling on the seaboard. Stocks of de-
sirable fleeces in this market are light. Ohio
fine laines sold at 34 1/2c @ 35c, X Ohio at
30 1/2c @ 31c, Ohio medium clothing at 36 @
36 1/2c, and medium clothing at 38c. Un-
washed fine sold at 20 1/2c for heavy and 23c
for light, and fine Ohio fleeces with the de-
laine in them at 23 @ 24c.

The New York market is irregular, and
the record of business is not what it should
be. Values there are about on a par with
those ruling in Philadelphia, with buyers
demanding concessions. In its review of
the market the Daily Bulletin says:

"Business has a more or less uncertain
tone still as neither sellers on the one side
or buyers on the other are working in har-
mony among themselves, and negotiations
having made some fair contracts for goods
grading fine, choice or fancy. The differ-
ences, of course, are not radical, yet suffi-
cient to keep alive the same dissatis-
faction to some long noticeable and prevent a
healthy general market, with a probability
that some of the same sentiment may dictate
ill opinions become a little more fixed upon
the tariff question. There is, however, a
larger amount of business doing, both here
and in neighboring cities, manufacturers
having made some fair contracts for goods
and feeling the necessity of providing ma-
terial against the same, and while some ir-
regularity on values is now and then develop-
ed, the average of cost does not differ to
any important extent from the figures for
some time current."

The London wool sales are progressing
favorably for sellers. Wools suitable for the
United States are a shade higher, and the
bidding upon all desirable wools is active
and spirited.

LIVE STOCK IN THE UNITED STATES.
The February statistical report of the de-
partment of agriculture relates to numbers
and values of farm animals. There is a re-
ported increase in horses, mules and cattle,
and a decrease in sheep and swine. The
largest rate of increase is in horses, 5 per
cent, and it is general throughout the coun-
try, though largest west of the Mississippi.
The aggregate exceeds 13,000,000. The in-
crease in mules averages 3 1/2 per cent, the
increase in cattle is 2 1/2. It makes the ag-
gregate over 49,000,000. The increase
is nearly as much in milk cows as in
other cattle. In sheep the decline ap-
pears to be between 2 and 3 per cent, the
aggregate of flocks being about 43,500,000.
There is a smaller decline in numbers of
swine, less than 1 per cent, leaving the ag-
gregate over 44,000,000. The aggregate
value of all farm animals is \$5,000,000 more
than a year ago.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

Wool.
As a whole the wool market shows some
improvement in tone, but so far without
causing any appreciation in values. The
eastern woolen markets are doing better,
the demand for heavy weight goods having
increased. This has caused manufacturers
to become more liberal in their purchases of
wool. It is now believed that a change in
the wool tariff is not likely to be made by
the present Congress, although there will
probably be an exceedingly bitter debate
when the tariff bill now being constructed in
committee is presented to the House. But
we feel certain that the more the matter is
discussed the stronger will be the position
of wool, and the more friends the industry
will have.

and unwashed, and for pulled stock. The
movement in territory continues steady.
There has been some trading in Texas
wools, but stocks are getting cleaned up
quite close. California spring wool is meet-
ing with a fair request. Combining pulled
is sought for, but is scarce, as the receipts
have been lighter than usual. A liberal in-
quiry is reported for B supers. The sales
in that market for the week comprise 3,854,-
500 lbs of domestic fleece and pulled and
3,315,000 lbs of foreign, making the week's
transactions foot up 3,184,500 lbs, against
3,315,000 lbs for the previous week, and
2,433,000 lbs for the corresponding week
last year.

The current quotations at Boston, as
compared with those ruling a year ago, are
as follows:

Item	Feb. 11, '87	Feb. 10, '88
Ohio & Pa X	32 1/2c	32 1/2c
Ohio & Pa XX	32 1/2c	32 1/2c
Ohio & Pa XXX	32 1/2c	32 1/2c
Michigan X	32 1/2c	32 1/2c
Michigan XX</		

Disease in a Poultry Yard.

CLINTON, Feb. 1, 1888.
To the Editor of the Michigan Farmer.

Will some one please tell me what ails my hens, and what to do for them? Five have died within the past two weeks. They eat well, comb seems to be slightly red till they die. On opening them I find the heart uncommonly large, liver four times its natural size with small white spots on it, intestines shrunk to almost nothing. Gizzard and crop seem to be full and look the same as in a healthy chicken, the gall also seems to be natural. I feed a variety of food as recommended in the FARMER, with plenty of fresh water and gravel.

Have about forty (all Plymouth Rocks) in a hen house built this fall 12x16, facing the south, with glass front and ventilator in the center. Any information through the columns of the FARMER will be gratefully accepted.

FRANK STANTZ.

The Newer Apples.

Secretary Hammond, of the Illinois Horticultural Society, in the report of the transactions makes a statement of the results of experiments with the newer apples. The Wythe, a new Illinois variety (described by Charles Downing in his Appendix), has proved hardy and productive, the fruit large and good, excellent for home use but of no value for market. Uter, a Wisconsin variety, described also by Charles Downing in the body of his work, is pronounced utterly worthless. Celestia, a round-headed, slow-growing, hardy tree, fruit of good size, very handsome and of fine quality, ripening in mid-autumn, "should be in every family orchard." Walbridge, formerly much commended, is now generally discarded, and pronounced by Mr. Hammond as small, imperfect, poor, and unworthy of cultivation, although very hardy. The Wealthy, a general favorite, has proved "most satisfactory, handsome and good." Haas, a good grower, but poor in quality. Among the other sorts, McLean (wrongly spelled in the reports "McClellan"), a handsome upright grower, with a very handsome autumn fruit. The Porter has been found nearly always large and smooth, the tree hardy and a regular bearer. The Russian varieties grow well till they bear, when they generally blight and die. Those which prove hardy do better in the extreme north, but south of 42° they are not wanted.

If you want the best garden you have ever had, you must sow

MAULE'S SEEDS.

There is no question but that Maule's Garden Seeds are unsurpassed. Their present popularity in almost every county in the United States shows it, for I now have customers at more than 22,500 post-offices. When once sown, others are not wanted at any price. Over one-quarter of a million copies of my new Catalogue for 1888 have been mailed already. Every one pronounces it the most original and readable Seed Catalogue ever published. It contains among other things cash prizes for premium vegetables, etc., to the amount of \$2500, and also beautiful illustrations of over 500 vegetables and flowers (15 being in color). These are only two of many striking features. You should not think of purchasing any seeds this Spring before sending for it. It is mailed free to all enclosing stamp for return postage. Address

WM. HENRY MAULE,
1711 Filbert St. PHILADELPHIA, PA.

DIAMOND CRYSTAL SALT

The purest, strongest, driest and whitest salt yet produced; the very best for the table and dairy. One butter maker who made over 14,000 pounds of butter in 1887 and sold it at an average of 30 cents per pound used the Diamond Crystal Salt and pronounced it the best salt he ever used. Many creameries which have used the Diamond Crystal Salt during 1887 say next year they will have no other. There is not one-twenty-fifth part as much lime in it as in the Ashton salt and not one-third as much moisture. The Diamond Crystal Salt is a natural crystal made fine without grinding. All salt is cheap and all can afford the best. Dairy men can't afford to use a salt strongly impregnated with lime, neither can any one afford to use a salt for cooking or table use that contains much lime.

Ask your grocers for this salt, insist upon having it, compare it with the salt you have been using; dissolve each in pure clear water and note the difference in the solution. One trial will satisfy you that this is the best salt you have ever used. Manufactured only by the

DIAMOND CRYSTAL SALT COMPANY,
St. Clair, Michigan.

For Sale Cheap.

The Standard-Bred Trotting Stallion
MANCHESTER 3202,
foaled in 1881, sired by Manchester 408, a son of Admiration 327; dam Oriole by Revolver 3106, will be sold at a bargain if applied for soon. For particulars address
Mrs. JAMES MOORE,
Milford, Mich.

SHORTHORN BULLS FOR SALE.

Eighteen months old Shorthorn bulls for sale cheap. Also two Clydesdales, one eight-year-old brown and one three-year-old with white face and white stockings. Sound and vigorous. Write for particulars.
JOHN P. SANBORN,
Port Huron, Mich.

Our New Non-Fracting Pottery Water was first prize at the Great National Show Jan. 18 to 20, 1888. Circular free. Pat. applied for.
B. A. BACON Grand Rapids, Ohio. 081-262

PENINSULAR WHITE LEAD AND COLOR WORKS

DRY COLOR MAKERS,

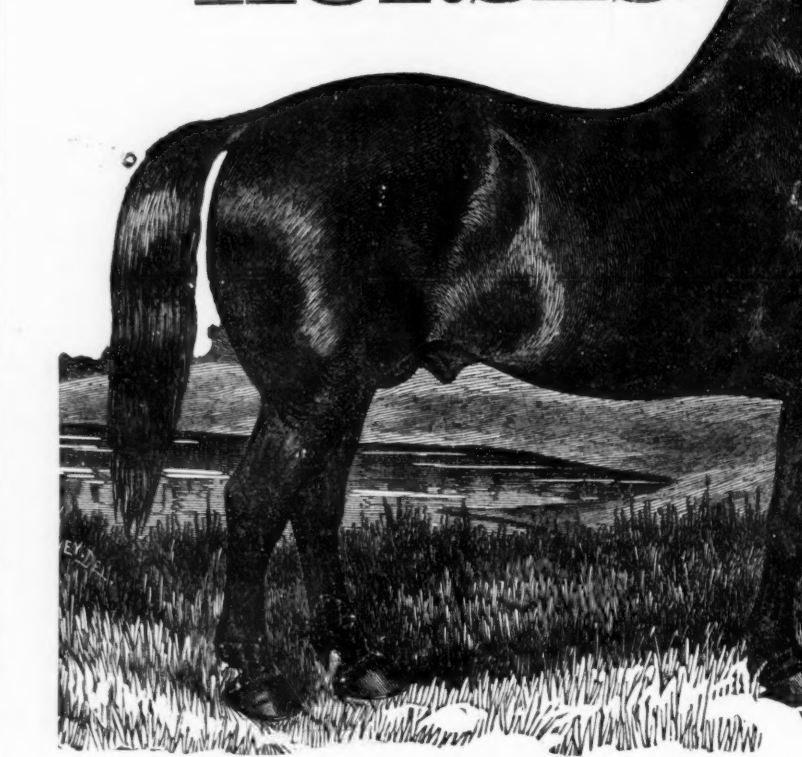
and Manufacturers of Fine Pure Paints for House Painting and Decorating, Superfine Coach Colors in Japan, Fine Pure Colors in Oil, Railway Paints, Priming, Filling, Rough Stuff and Surfaces, Pure Ready Mixed Paints, White and Tinted Leads, Carriage Paints Ready for Use, Quick Drying, in Nine Colors, Dipping & Paste Paints for Wagon Makers and Agricultural Implement Makers.

We offer special inducements to large buyers on Peninsular Permanent Red, Vermilion, Chrome Green and Yellow, Maple Leaf Permanent Green, Prussian Blue, and other colors. Rose Pink, Lakes, Pulp Colors, Wall Paper Colors and other specialties for grinders, paper manufacturers, lithographers, etc. Peninsular non-corrosive iron filler and steel color paints (four shades) for foundries, machinists, engine builders, etc. Peninsular Wood Fillers are warranted to give satisfaction in every respect. Correspondence solicited.

FARRAND, WILLIAMS & CO., General Agents, Detroit.
Factory on Leif St., from Transit R. to River Front, Detroit, Mich.

ISLAND HOME STOCK FARM.

PERCHERON HORSES!



Nearly two hundred horses on hand. Every animal recorded with extended pedigree in the Percheron Stud Books of France and America. Prices reasonable, terms easy and stock guaranteed. Visitors always welcome. Carriages at all trains and steamboats.

COME AND SEE THE ISLAND FARM.

Catalogues free by mail to applicants. Address

SAVAGE & FARNUM,
CAMPBELL BUILDING,
Detroit, Mich.
See our advertisement of French Coach Horses in another column of this paper.

Merrill & Fifield, Bay City, Mich.



For the Next 60 days we will offer

Ten Fine Young Bulls at Farmers' Prices.
FIRST COME, FIRST SERVED!

TO CLOSE OUR PARTNERSHIP

BY APRIL NEXT, WE HAVE DECIDED TO OFFER OUR
CHAMPION GOLD MEDAL STUD.

300 Cleveland Bays and English Shires. 300

All young and vigorous stock, nearly all imported as yearlings and grown upon our farms here therefore thoroughly acclimated. Stallions and mares of all ages and of the choicest breeding.

Also our celebrated 150 HOLSTEIN-FRIESIAN CATTLE

at very much reduced prices rather than incur the expense and risk of an auction.

A Rare Opportunity is given to secure First-Class Stock at Low Figures. Send for Illustrated Descriptive Pamphlet, and mention this paper.

GEO. E. BROWN & CO., Aurora, Kane Co., Illinois.

PERCHERON HORSES.

FRENCH COACH HORSES.

More Imported and Bred than by any other Eight Establishments.

511 PURE-BREDS Now Actually on Hand.

Experience and Facilities Combined in Furnishing Best Stock of Both Breeds at Reasonable Prices.

Separate Catalogues for each breed, with history of same. Say which is wanted. Address

M. W. DUNHAM, WAYNE, DU PAGE CO., ILLINOIS.

DOOR PRAIRIE LIVE STOCK ASSOCIATION.

DOOR VILLAGE, LA PORTE CO., INDIANA.

IMPORTERS AND BREEDERS

Stock selected with reference to Style, Action and Quality, combined with good pedigree. 62 imported in July. 100 on hand. Prices reasonable.

FOR SALE.

A highly-bred Shorthorn bull of Bates blood—about nine months old, color red, and a fine dividend. His pedigree is as follows:

sire—Pennell Duke 2d of color red 60231 he by Lord Bates 5432, out of Pennell Duchess 3d of color red by Imp. Wild Cat 3490, which will be sold at a very reasonable figure. Address

Mrs. JAMES MOORE, Milford, Mich.

2 dam—Fantasia 3d by 8th Duke of Vinewood 32445.

3 dam—Finesse 3d by Millbrook (34851).

4 dam—Fidelity by Dewberry (41251).

5 dam—Fidelity 4th by Duke of Oxford (33738).

6 dam—Imp. Franchise 4th by Duke of York (10407).

7 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

8 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

9 dam—Fidelity 4th by Duke of Oxford (33738).

10 dam—Fidelity 5th by Duke of York (10407).

11 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

12 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

13 dam—Fidelity 4th by Duke of Oxford (33738).

14 dam—Fidelity 5th by Duke of York (10407).

15 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

16 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

17 dam—Fidelity 4th by Duke of Oxford (33738).

18 dam—Fidelity 5th by Duke of York (10407).

For Sale Cheap.

FIFTY HEAD OF THOROUGHBRED HEREFORDS

Twenty-five heifers and young cows with calves at foot and 25 young bulls from 12 to 18 months old. Stock all first class. Some fine imported cows, richly-bred, the blood of Old Horace, The Grove 3d and Lord Wilton.

Don't be afraid of fancy prices but come and see the stock or write for prices.

JOHN W. FOSTER,
Manager Grap Farm,
Swartz Creek, Mich.

2 dam—Fantasia 3d by 8th Duke of Vinewood 32445.

3 dam—Finesse 3d by Millbrook (34851).

4 dam—Fidelity by Dewberry (41251).

5 dam—Fidelity 4th by Duke of Oxford (33738).

6 dam—Imp. Franchise 4th by Duke of York (10407).

7 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

8 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

9 dam—Fidelity 4th by Duke of Oxford (33738).

10 dam—Fidelity 5th by Duke of York (10407).

11 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

12 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

13 dam—Fidelity 4th by Duke of Oxford (33738).

14 dam—Fidelity 5th by Duke of York (10407).

15 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

16 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

17 dam—Fidelity 4th by Duke of Oxford (33738).

18 dam—Fidelity 5th by Duke of York (10407).

19 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

20 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

21 dam—Fidelity 4th by Duke of Oxford (33738).

22 dam—Fidelity 5th by Duke of York (10407).

23 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

24 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

25 dam—Fidelity 4th by Duke of Oxford (33738).

26 dam—Fidelity 5th by Duke of York (10407).

27 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

28 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

29 dam—Fidelity 4th by Duke of Oxford (33738).

30 dam—Fidelity 5th by Duke of York (10407).

31 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

32 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

33 dam—Fidelity 4th by Duke of Oxford (33738).

34 dam—Fidelity 5th by Duke of York (10407).

35 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

36 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

37 dam—Fidelity 4th by Duke of Oxford (33738).

38 dam—Fidelity 5th by Duke of York (10407).

39 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

40 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

41 dam—Fidelity 4th by Duke of Oxford (33738).

42 dam—Fidelity 5th by Duke of York (10407).

43 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

44 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

45 dam—Fidelity 4th by Duke of Oxford (33738).

46 dam—Fidelity 5th by Duke of York (10407).

47 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

48 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

49 dam—Fidelity 4th by Duke of Oxford (33738).

50 dam—Fidelity 5th by Duke of York (10407).

51 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

52 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

53 dam—Fidelity 4th by Duke of Oxford (33738).

54 dam—Fidelity 5th by Duke of York (10407).

55 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

56 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

57 dam—Fidelity 4th by Duke of Oxford (33738).

58 dam—Fidelity 5th by Duke of York (10407).

59 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

60 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

61 dam—Fidelity 4th by Duke of Oxford (33738).

62 dam—Fidelity 5th by Duke of York (10407).

63 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

64 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

65 dam—Fidelity 4th by Duke of Oxford (33738).

66 dam—Fidelity 5th by Duke of York (10407).

67 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

68 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

69 dam—Fidelity 4th by Duke of Oxford (33738).

70 dam—Fidelity 5th by Duke of York (10407).

71 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

72 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

73 dam—Fidelity 4th by Duke of Oxford (33738).

74 dam—Fidelity 5th by Duke of York (10407).

75 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

76 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

77 dam—Fidelity 4th by Duke of Oxford (33738).

78 dam—Fidelity 5th by Duke of York (10407).

79 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

80 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

81 dam—Fidelity 4th by Duke of Oxford (33738).

82 dam—Fidelity 5th by Duke of York (10407).

83 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

84 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

85 dam—Fidelity 4th by Duke of Oxford (33738).

86 dam—Fidelity 5th by Duke of York (10407).

87 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

88 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

89 dam—Fidelity 4th by Duke of Oxford (33738).

90 dam—Fidelity 5th by Duke of York (10407).

91 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

92 dam—Fidelity 3d by 8th Duke of Vinewood (34851).

93 dam—Fidelity 4th by Duke of Oxford (33738).

94 dam—Fidelity 5th by Duke of York (10407).

95 dam—Fantasia 4th (Vol. 29), by 8th Duke of Vinewood 32445.

DIRECTOR OF MICHIGAN BREEDERS

CATTLE.—Shorthorns.

AARON P. BLISS, Swan Creek stock farm, breeder of thoroughbred shorthorns. Stock for sale. Correspondence solicited and promptly answered. S. Baldwin, Manager. P. O. address, Saginaw, Saginaw Co., Mich. a22-25

A. J. CHANDLER, breeders of Shorthorn cattle, Shropshire sheep and Essex swine. Stock for sale. Correspondence solicited. Jerome

A. D. DEGRAAF, Highland, Oakland Co., breeder of Shorthorn cattle. Stock for sale at reasonable prices. m15-5-m

A. J. COOK, Owasco, breeder of Shorthorn cattle, Poland China swine and Shropshire sheep. Stock for sale. Write for price and breeding. 029-2517

A. J. LEBLANC, Rose Corners, Oakland Co., breeder of Shorthorn cattle. Stock of both sexes for sale. Correspondence solicited. P. O. address Fenton, Genesee county. j6-1

A. P. COOK, Brooklyn, Jackson Co., breeder of Shorthorn cattle. Good families represented. Bull Major Crags at head of herd. Choice young bulls for sale. a21y

ARTHUR ANDERSON, Montpelier, Allegan Co., breeder of Shorthorn cattle, established 15 years, with home 2730 by 33d Duke of Air-drie and Minnie's head by Barrington Duke 3d 37024 at head. Correspondence solicited.

BENJ. F. BATCHELDER, Oceola Center, Livingston Co., breeder of Shorthorn cattle. Young Mary and Young Phyllis families, with the best blood of Sharon bull—Sharon Duke of Clark's at head of herd. Young heifers for sale. Also registered Merino sheep.

C. F. MOORE, St. Clair, breeder of Shorthorn cattle. Families represented: Barrington Kirkling, Virginia Ditches, Oakland Co., Vanquish and Tea Rose. Bulls in the herd: Lord Kirkling of Erie 4182, Grand Duke of Air-drie 6252 and Barrington 3588. June-17

C. L. GUNTER, Springdale Stock Farm, Williston, Ingham Co., breeder of thoroughbred Shorthorns, Vermont and Michigan bred Merino Sheep and Percheron horses. Stock for sale. Correspondence solicited. j6-17

D. M. CHIL, Brookside Herd, Ypsilanti, Choice making qualities for sale. Correspondence solicited. j2y-12

F. S. BURNETT & SON, breeders of Shorthorn cattle. All stock registered. Reside on a half mile east of Hancock, Shiawassee Co. Stock for sale. j2y-12

F. A. BRADEN, Victoria Stock Farm, Bancroft, Shiawassee Co., breeder of pure bred Shorthorns of the Victoria and Stapleton families, with Lord Raspberry 2d 48533 at head of herd. Stock for sale. j6-17

Poetry.

A PLEA.

Columbia, large hearted and tender,
Too long for the good of your kin
You have shared your home's comfort and
splendor
With all who have asked to come in.
The smile of your true eyes has lighted
The way to your wide open door;
You have held out full hands and invited
The beggar to take from your store.

Your over-run proud sister nations,
Whose offspring you help them to keep,
Are sending their poorest relations—
Their unruly, their vicious black sheep,
Unwashed and unlettered you take them,
And lo! we are pushed from your knee;
We are governed by laws as they make them,
We are slaves to the land of the free.

Columbia, you know the devotion
Of those who have sprung from your soil;
Half aliens born over the ocean
Dispute us the fruits of our toil?
Most noble and gracious of mothers,
Your children rise up and demand
That you bring us no more foster brothers
To breed discontent in the land.

Be prudent before you are zealous—
Not generous only but just;
Our hearts are grown wrathful and jealous
Toward those who have outraged your trust,
They snarl and crowd in our places,
They jostle at the comforts you gave;
We say, shut the door in their faces,
Until they have learned to behave.

In hearts that are greedy and hateful,
They harbor ill will and deceit,
They ask for more favors, ungrateful
For those who have poured at their feet.
Rise up in your grandeur, and straightway
Bar out the bold clamoring mass;
Let sentinels stand at your gateway,
To see who is worthy to pass.

Give first to your own faithful toilers
The freedom our birthright should claim,
And take from the ruthless despoilers
The power which they use to our shame.
Columbia, too long you have dallied
With foes whom you feed from your store;
It is time that your wardens were rallied
And stationed outside the locked door.

—Ella Wheeler Wilcox.

SPIRITUAL COMPANIONSHIP.

Do we indeed desire the dead
Should still be near us at our side?
Is there no baseness we would hide?
No inner villainies that we dread?

Shall he for whose applause I strive
I had such reverence for his blame,
See with clear eyes some hidden shame,
And be lessened in his love?

I wrong the grave with fears untrue:
Shall love be blamed for want of faith?
There must be wisdom with great death:
The dead shall look me through and through.

Be near us when we climb, or fall;
To watch, like God, the rolling hours,
With larger eyes than ours,
To make allowance for our faults.

—Tennyson.

Miscellaneous.

A PAIR OF WEDDINGS.

"You don't say so!"
Grandma Pine looked sharply over her
spectacles at pretty Nancy Campbell, who
sat at her feet on an old-fashioned "cricket,"
the blaze of the open fire playing on her
bright, flushing face, and lending a richer
color to the crown of fluff hair that
hid her white forehead.

Nanny had come up to Traverse to spend
Thanksgiving with her grandparents. She
came the day before, but her father and
mother could not leave till the next morning.
Dr. Campbell was too busy a man to
spend more than a day from his practice;
and Nanny was glad to come alone, for she
had a great piece of news to tell grandma.
Yes, with a deeper glow than the firelight
on her drooping face, she imparted the won-
derful intelligence that she was engaged to
Jack Norton, and was going to be married
on Christmas. Now grandma was really not
much surprised, for Jack Norton was the son
of Dr. Campbell's oldest and best
friend, and the children had known each
other always. Grandma, with the forecast-
ing wisdom of old ladies, had prophesied to
herself this result years ago, yet she thought
she was surprised to find her prophecy ful-
filled.

Perhaps it never would have been had
Nancy and Jack lived next door to each
other always; but when they were yet chil-
dren Mr. Norton had left Ridgefield and
gone to Boston to live. And Jack, more-
over, had been sent to Germany for his pre-
paratory studies, and to England for his
collegiate education, so he was as good as a
stranger when he came home to share his
father's business; and when he saw pretty
Nanny, who had blossomed from a plain,
angular little girl into a lovely young wo-
man, he fell in love with her after the good
old fashion, and she returned his passion
with all the faith and fervor of a girl's first
serious affection.

They had been engaged several months,
but Nanny had not announced the fact to
any but her father and mother. She was
so shy and cautious, so she waited to tell
grandma until the wedding day was set.

Grandma was ready with congratulations,
yet, as she drew the fair young head down
to her knee and stroked the bright hair
with tremulous fingers, she sighed, for she
had lived too long not to dread life for the
child she loved so well.

"I'm kinder pleased," she confided to
grandma, in that "grand committee of two"
which married people hold on matters that
interest them or their neighbors, "and I'm
kinder distressed too. I don't like this
bein' a lawyer, 't'ner seemed as though
'twas a reliable business, nor one that a
real honest, straightforward man could fol-
der."

"'t' she wasn't goin' to be married in Decem-
ber?"
And while Nanny was bustling around
in the kitchen the next morning, stirring
cold milk into the Indian pudding that to-
day had the great oven to itself, basting the
huge turkey in the roaster, garnishing the
tongues, keeping an eye on the chicken pie
that stood on a tripod in the chimney cor-
ner to keep it hot after it had been drawn
from the aforesaid oven, and doing for
grandma all the little odds and ends that
are so much work for our old people and so
little for young ones, grandma was revolv-
ing in her mind certain good counsels for
the girl, which might or might not be ac-
cepted and acted upon, for grandma had
old-fashioned ideas. She spoke at last, her
fingers meanwhile busy preparing potatoes
for the pot that stood bubbling to receive
them:

"So you're goin' to be married Christmas
day, be you, Nanny?"
"No, dear, Christmas eve."
"Seems pretty cold time for a wedding,"
said grandma, taking up another potato.
"Well, yes. Jack would not wait till
June, when I wanted to have it; he said he
never believed in long engagements. And
mother thinks just so; that is, where peo-
ple have known each other as long as Jack
and I have."

"Goin' to be married in church, is 't'pose?"
"Oh, yes, and then a reception. Now
you and grandma must come down. I want
you to promise."

"We're a'most too old and too rheuma-
tick, Nanny, to go junketin' round in
midwinter."
"No, you're not, not a bit. The cars are
warm, and mother'll have a fire in your
room, and it's going to be such a pretty
wedding. Six bridesmaids, granny, all of
them pretty girls, too, in low dresses of pink
satin, with ruses and short veils of tulle.
They'll look just lovely. And Dr. Adams
—you remember Everett Adams, who stud-
ied with father—he's to be best man."

"Land!" ejaculated Grandma. "I should
think Jack would be the best man amongst
'em."
"Well," laughed Nanny, with a blush
that would have been the precise tint for
her bridesmaids' dresses, "I think he is;
but that isn't what they call him."
"And what is 'low' dresses?" queried
grandma.

"Oh, low-necked, and with no sleeves;
just a strap across the shoulder, you know."
"Good gracious!" exclaimed the old lady,
looking over her spectacles with a glare of
horror, "I should think that was 'low'!
Dreadful low, too. They'd ought to be
'shamed of themselves!'"

"Why, gran', it's the fashion."
"I don't care nothing about that, child;
it ain't decent, nor it ain't pretty. Who
wants to see them girls' bones? and girls in
these days haven't got much more'n skin
and bones. Maybe that young doctor may
like studyin' of 'em, and seein' how the
joints work; but I should rather be a dead
skeleton than a live one, if I was a-goin' to
be studied by a young doctor."

"Grandma, I do think you're dreadful.
Why, Alice Brooks has got neck and arms
like a baby; and Rosina Leavitt's are love-
ly, too, if she is a little dark."
"Well, fool's ain't all dead yet," retorted
grandma, with some severity. "When I
was married 'twas daylight and to home.
Eben and me was going down to Boston
for a spell; he was in old Silas Banker's
store then. I had on a dark blue cloth habit
with frogs on it, and a big Leghorn bon-
net with a white feather, real long and
curly, and some red roses under the front
on't. 'Twas warm an' sensible for a long
ride in September, and our folks thought I
looked consider'ble well."

The old lady's keen dark eyes and deli-
cate aquiline profile, though the waved hair
was now snow white, and the small mouth
had lost its color and fullness, made Nanny
acquiesce in "our folks' verdict."
"I guess you looked just lovely, grandma,
but—"

"Say! here's the doctor!" screamed
Thankful Bangs, who was setting the table
for dinner, and Nanny's speech was never
finished, for she and Grandma rushed out
to meet the welcome guest.

Two hours later, when the dinner had
been discussed and the guests were picking
out their walnuts and butternuts, the never
failing last course at Traverse for Thanksgiv-
ing dinner, Mrs. Campbell said, sudden-
ly, "Oh, Nanny! I quite forgot. Here's a
little note that came for you after you left."

Nanny took the envelope, and, after the
fashion of women eyed it on the outside,
turned it over and examined the seal, and
then re-turned it and inspected again the di-
rection and the postmark.

—such a set of pale pink coral and pearls!
Oh dear!"
"I should think she'd got some sense,"
put in grandma. "I don't see why you
want to make your wedding a killin' busi-
ness to all them poor young creturs."

"That's just it, mother," said the doctor,
"Last winter there was just such an-
other wedding in December. All these
girls had to ride a mile to the vestry of St.
Paul's, form there and tramp round to the
front door of the church; drop their wraps
off at the doors, where the cold wind struck
their bare chests and shoulders; stand twen-
ty minutes at the altar; ride back that
mile; and stand up all the evening
at a reception so crowded that the win-
dows had to be dropped from the top to
prevent asphyxia; and then at midnight
drive back to their homes, the thermometer
being six below zero. There were six bride-
maids there; had acute bronchitis; another,
tonsillitis; the other two, being tough or
case-hardened, escaped with severe colds.
So much for low dresses at a church wed-
ding!"

"Nanny wasn't one of 'em?" asked
grandma, anxiously.
"No; she went to the wedding, but by
vigorous researches into the possibilities of
fashion, I discovered that young women do
sometimes wear what they call a V-shaped
neck to their dresses, a fashion that only
exposes the most sensitive part of their
lungs both in front and at the back. How-
ever, Mme. Delano, the autocrat of our city
dressmakers, is a patient of mine, and I
held counsel with her; so Miss Nanny went
to that party in a very pretty as well as
a respectable gown, for I had Madame
'fill in,' as she called it, that absurd piece-
of pie-shaped neck with thick satin covered
with costly lace, and there were actual
sleeves to the gown, short, to be sure, but
long kid gloves met them, so my daughter's
person was not on exhibition like Barnum's
'fat lady' that night, and she was consoled
for being decent and warm against her will
by the expensive lace and some new brace-
lets."

"Oh, papa!" exclaimed Nan.
"That is just so, my dear; and when you
came home did you not find a cup of hot
broth waiting for you? and a fire in your
room? Who do you think ordered that?"

Nan looked at her father with dimmed
eyes, and blew a kiss at him across the table;
she just began to realize the care that had
surrounded her all her days.
But she must answer that note.

"What shall I say to Alida, mamma?"
Mrs. Campbell was a quiet, sweet, motherly
woman; but more sympathetic than the
doctor, she better understood how powerful
fashion is with girls, how few have strength
of character to withstand its stringent if ab-
surd demands.

"I don't think you can drop her,
Nanny," she said. "I think that would be
unkind and needless. She is to be first
bridemaid, and therefore stand next to you;
and as you are to wear a high dress, hers
will not be as conspicuous as if she were
among the others. I agree entirely with
your father, and I am glad it was not your
suggestion that the rest should wear low
dresses."

So the matter was settled, and in due
time the wedding came off. It was a pretty
wedding, as Nanny had assured grandma it
would be; but the old people of Traverse
did not come down for it; the snow lay
deep over all the country, the thermometer
sank to depths unusual even in New Eng-
land, and keen winds swept across the
shining drifts that seemed to pierce the
heaviest clothing.

"We love ye just as much, dear," wrote
grandma, "as though we come to see you
married; but we're old folks, and the weath-
er is consider'ble cold for anybody to be out-
in; and he is threatened some with scatiety,
so we doesn't risk it. So we send you a
little matter to buy a wedding present with,
bein' you're all the gran'child we've got,
and do ye get somethin' real useful or com-
fortable with it for to remember your very
lovin' grandma and grandma."

A check for \$500 fell from the letter.
"Oh!" exclaimed Nanny. "Now I can
have a sea-skin! I didn't want to ask
father for it."

While the bridal procession was forming
—I am afraid even at the altar, certainly at
the after reception—the "best man" was
observed by a disinterested spectator to turn
his eyes very often upon Alida Van Alstyne.
No wonder; she was a very lovely girl, and
to-night was at her best; the delicate rose
satin that clothed her stately little figure up
to her throat and down to her wrists shone
like a pale sunset through the filmy lace
that was draped over it and caught up with
blush-roses; where the lace crossed her
bosom in a V fold from either shoulder a
brush of the same roses nestled, and the
frill of rich lace that stood up about her
throat was held in place apparently by a
cord of silver filagree, fine as frost-work,
clasped by a rose of pink coral in whose
heart sparkled a diamond dewdrop; the
short veil that rested on her coronet of dark
hair was held by a rose and its bud; the
whole dress was exquisite. And, best of
all, a warm natural color lit her face like
day, and she looked, as she felt, comfortable
and at ease.

But the others, poor souls, how could they
help it? they were pinched with cold; their
cheeks colorless, their pretty noses abso-
lutely blue; and Rosina Leavitt could not
smother with her utmost efforts and her lace
handkerchief the inmost little cough that
made Dr. Campbell knit his forehead and
sit uneasily in his seat, for he knew the
girl had a sad inheritance of blood; her
mother came of a consumptive family.

Dr. Everett Adams did not forget his ad-
miration for the "first bridemaid" when
this wedding was over. He became more
and more devoted, and the next September
society in B— was pleased but not sur-
prised to hear his engagement to Miss Van
Alstyne announced. By a rather odd coin-
cidence their wedding too was fixed for
Christmas Eve. Alida Van Alstyne was
very wealthy, if she was very sensible. She
had as many "maids" to attend her as
Nanny Campbell, and she gave them in their
dresses. They were of rose satin, too, but
made high in the neck and long-sleeved,
the quaintly-cut basques trimmed with
white fur, a broad band of it edging the
short full skirts; poke bonnets of the same
satin wreathed with short white ostrich
feathers, and bunches of white roses on the left

shoulder, completed the charming and warm
costumes. Not one among the pretty group
had ever looked so pretty or been more com-
fortable. And the bride was lovelier than
ever in her close robe of spotless satin, with
no sparkle of jewel or glitter of gold about
her, but profuse white roses garlanding from
throat to hem her long dress, and a crown
of them fastening the veil of Mechlin that
was all the drapery that over the solid
moonlight folds of her train.

Mrs. Jack Norton looked on from a chan-
cel pew, and thinking of her own wedding,
gave a silent sigh to poor Rosina Leavitt,
sleeping in her southern grave. That
troublesome little cough had done its work.
She had taken cold in the church, and gone
down to death so fast no human power
could stay her steps.

"Do you know what fixed my first young
affection on you, as the novelists say,
Alida?" asked Dr. Adams, as he sat with
his bride on the walls of the old fort at St.
Augustine two weeks after their wedding.
"I suppose it was my beauty," she an-
swered, with a look and laugh of coquettish
mischief, for Everett Adams had always
said that he never could or would marry any
woman merely for her good looks.

"No, indeed, madame. Though I don't
deny the self-evident fact of your ladyship's
loveliness. But the first thing that attrac-
ed me was your sensible and comfortable
dress at Mrs. Norton's wedding. If the
other bridesmaids had only known how
pinched and forlorn they looked, how little
those bare arms and necks were admired by
the spectators, it would have taught them
some things. But you were blooming and
radiant, and your dress far handsomer than
theirs. I could not have fallen in love with
a red nose and pale cheeks, I admit."

Alida laughed and the doctor kissed her.
There was only a sea-skin to be shocked—
Rose Terry Cooke, in Harper's Bazar.

Friendship with a Bird.
I have had one little, brief, friendship
with a bird during the present summer,
which seems like a tender dream, a fleeting
glimpse into an unknown world, a peep into
fairy-land, to me.

On one summer morning, which had
succeeded one of those coolish nights, which
come a little sharply after a season of in-
tense heat, I stepped out into the old-fash-
ioned garden which lies just beyond my ap-
ple tree. A group of crimson petunias was
held up by a little dry shrub, to keep them
from trailing their silk dresses on the
ground below, and there, perched on one of
its bare twigs, a little bunch of green-gold
feathers, sat a young humming-bird. I softly
came nearer and nearer, expecting every
moment that he would fly away; but the
little thing seemed chilled or sleepy, and
I at last took him in my hand. He did not
seem to flutter, but gasped a little, and
I thought him dying. I kept him in my
warm hand, and sending for a lump of
loaf sugar and a tiny glass of water, I took
him indoors. I patiently held him in one
hand, warming him, while with the little
finger of my right hand I held a drop of the
sweetened water to his bill for some min-
utes, and was finally rewarded by the little
bill opening and the wiry little tongue sip-
ping the sweet from my finger, running
about under the nail of it, as if it were a
flower. He soon grew lively, flew around
the room, and crept on some flowers on
my dresser. After he took longer flight,
and grew so tame that when he was hungry
he would fly down to me from top of a pic-
ture or mirror frame, and alight on a little
twig which I would hold out, where he
would sit and sip his sugar and water from
a teaspoon or the end of my finger. Three
drops satisfied his desire for the time, and
away he would fly again, always alighting
with a little chirp, or rather squeak, for it
sounded precisely like a little mouse. Once
I varied his food with diluted honey, but he
seemed to prefer the sugar. I gave him the
range of two rooms, and having no cage I
fastened a spray of fuchsias by my window,
where he slept at night, with the tiny head
under the wing, never moving until the
dawn came, when he became uneasy until
he had his sip of sugar and water.

What completely won my heart was the
fearless confidence of the little thing. One
day, I remember, he had alighted on the
edge of the dish of honey, and losing his
balance, he smeared his breast with the
thick honey. I cleaned it as well as I could,
but some of it dried and stuck the small
feathers together. The next day I tried
again to moisten and clean them out with
some soft article and tepid water. He was
sitting on a twig held in my left hand, and
as I rubbed a little hard, he seceded and
moved a trifle along on the twig, as much as
to say, "work away, but please be patient."

Another thing he delighted in was to be
held on this twig over a large spoonful of
soft water, and dip in his beak and splash
water over his little body.

I did not have him long; indeed, how
could I rob him of the out-door, happy Au-
gust days, which were passing so rapidly out
of his brief life. So I said to myself every
morning, while I surrounded his window
with fresh flowers, and still kept the glass
closed between him and freedom; but the
little thing awakened an almost human love
in the heart with his own trusting confidence
and his rare, gem-like beauty.

Finally, one evening, when he seemed
settled on his twig for the night, I opened
an outside door to the room for a brief mo-
ment, and just as I was closing it again,
there came a little whirr over my head, a
dash of golden green, and he was gone.

That night it blew and rained. I could
not sleep, for it seemed to me there was a
tender baby out in the chilly rain. But I
have seen many humming-birds since then,
still flying about the petunias and late sum-
mer roses, so we will trust that my little
one was soon sheltered and companioned among
his own relations, and ready to start with
them on the long aerial journey southward.
But to me he was a visitant from fairy-
land.—Vick's Magazine.

A CHARITY PATIENT.

"After all I've done for you, Barbe, I
should think you'd try and make a good
match," said Mrs. St. Stephens, fretfully.
"I shall make a good match, mother,"
replied her only daughter Barbara, quietly.
The elder lady laughed unpleasantly.

"A country doctor, with one charity pa-
tient! I congratulate you on your brilliant
prospects, dear."
Barbara St. Stephens flushed.
"Yet is as good as gold, and loves me
and his profession! For the money—ye
can wait."

"Oh, Doctor Fordyce is good enough—I
rather like him myself; but Hillsboro is a
distressing healthy place. The best doc-
tor in the country would starve here; and
you'll be single at twenty-five—see if you
don't, Barbe."

"I shall be single at seventy-five if I
don't marry yet, mother."
"And you'll never be rich."
"I can bear that very well, mother."
"You are so handsome, with your pale,
Clytie face and rich yellow hair, and so well
educated, and I've laid such plans for you!
Why couldn't you have chosen somebody
else, Barbe?"

"How could I, mother?" returned the
girl, with a soft laugh.
"Well, I know Dr. Fordyce is taking,
with his kind ways. He was a good son of
his old mother and a good son makes a good
husband; but I'm terribly disappointed,
Barbe."

"Why, I'm happy; I don't see what more
I can ask for me, mother," replied the
girl, brightly.
Mrs. St. Stephens murmured something
about a fool's paradise, but with care that
Barbe did not hear; for she loved the girl
and loved to see the joy and content of her
air. She did not see that she had shadowed
it, for Barbara left the room.

The latter went up to her chamber and
sat down alone. The flush which had risen
to her cheek at her mother's sneer at Doc-
tor Fordyce's practice still lingered, despite
her cheerful air. No amount of content on
her part altered the fact; her matrimonial
prospects were not peculiarly good. When
the old physician of Deephaven, Sylvester
Fordyce's uncle, died a year previous, the
young man succeeded in his practice, hav-
ing studied with him for three years. But a
few years, and chronic invalids had died on
his hands, presenting, perhaps, his well-
meant efforts to cure them, and the salu-
bitary air of Deephaven was not propitious.

It was true that his only patient that fine
summer day was Ransey Sniffles, an old
outcast, living on the outskirts of the vil-
lage. It was reported that this queer crea-
ture was not the old fellow's own; but no
one knew any other, where he came from,
or who he was. He had come to Deephaven
five years previously, bought the shabby
where he lived, which had been the shelter
of a charcoal burner, and supported him-
self trapping and fishing if not thieving,
he was universally shunned, and only a
chance knowledge of his lonely suffering
made him Doctor Fordyce's patient.

"I might 'a' died here alone, doctor, if
it hadn't been for you," he said, when re-
lieved of his suffering. "I tak' it mighty
kind of you to come out here."
"Rheumatism of the heart is a pretty
dangerous thing," replied Dr. Fordyce.
"You need to be careful of yourself now,
or you will have another attack. Avoid
chills, and build yourself up with a light
nutritious diet."

He was repeating his usual formula of in-
structions when the woful look of the man
attracted his attention.
"You are in need, I am afraid," he said,
kindly. "I will try and assist you. A
friend of mine will bring you up some little
delicacies to-morrow," he added, as he laid
a silver dollar upon the table at the bedside,
and by the way the old man grasped the
coin he knew he must have felt the need of
money. It was pitiful to be old, poor, sick
and alone, and he told Barbara so when
they next met.

But that afternoon Barbara sat thinking
in her chamber. Lifting her eyes to the
mirror she could see the Clytie face which
she knew her mother built so many ambi-
tions on.
It was a little hard on her proud, pushing,
fussy little mother, she thought, with a half-
sad smile, but the idea of looking at her
face and hair as a market commodity was
more absurd than anything else. They gave
her pleasure, and she thought no more about
them. Barbe was one of the pretty girls
who are not vain.

That evening Doctor Fordyce came to
take her to drive, and spoke of his charity
patient.
"Poor creature," said Barbe. "You had
better take me to see him. Bab, turn back
to the house and I will take a basket of
little things that will be of use to him."

shall continue to attend you, as we don't
seem to have conquered your old enemy,
rheumatism, yet."
"And I will come and bring you some
beef-tea to-morrow," said Barbara, cheer-
fully. "Keep up good courage; you will
soon be better."

As they drove away Doctor Fordyce said:
"You will make a famous doctor's wife,
Barbara."
"Thanks," she said, smiling.
But the sick old man was a sad sight for
her young eyes; she could not forget him,
and carried him clean linen and blankets
with his beef-tea, and day after day visited
him in his tedious illness, walking to the
charcoal burner's hut when it was imprac-
ticable for her to ride, and appearing in the
dingy hut like a celestial vision.

"The sight of you's good for sore eyes,"
quoth old Ransey one day. "How pretty
you be! Say he," he added, "ye pity me don't
ye?"
"I'm very sorry for you," answered
Barbe. "I hope I shall never be sick and
alone."

But the old man was no longer actually
alone, for Doctor Fordyce had sent up his
own man-of-all-work, who made his patient
groan by his frequent ablutions of the whole
premises, his own poor person included.
"I don't see any need o' cleanin' a body so
much," he would say, fretfully, and Mat
would only contrive to get his way by an-
nouncing that Barbara was coming.

"You'll want to look nice for the young
lady, Ransey."
"Well," sighed the poor old creature, "I
ain't wore this shirt but three days an'
there's nothin' on it but the medicine I spill-
ed and the gruel I tipped over, so my hand
shakes so. But don't—don't!—in agony—
turn over the bed, Mat."

"No, no, I won't," said Mat, soothingly;
for the poor soul trembled violently and
always seemed overcome at the prospect of
disturbing the foundation of his miserable
nest. "I'll just straighten the sheet an' set
your pillow straight. There now, ye be all
nice—and the doctor and the young lady
coming!"

"I can't cure you, Ransey. Have you
any friends you would like to see?"
The old man lay silent for awhile, then
he said, weakly:
"No, there's none. I never had such
friends as you an' miss in my hull life, I s'ar."
"You have had a hard time, Ransey.
We will hope the next life will be brighter
for you. Is there anything you need?"

"Nothin'—nothin' in the wide world,
doctor; an' I'm thankful for all yer kind-
ness."
"Oh, that is all right!" responded the
young man cheerfully.
Barbara came back with a handful of the
bright roses, which she placed by the poor
man's bed.

When, half an hour later, the two were
preparing to depart, old Ransey said:
"You'll recollect, doctor, that I said I
knew your kindness an' was thankful for
it?"
"Yes," responded the doctor.
They never saw him alive again. He died
that night.

Here's a package he bid me take out
from between the beds, sir," said Mat to
Doctor Fordyce. "It's all tied and sealed
up; but, weak and all as he was, he wrote
on the wrapper: 'This book I give and be-
queath to my friend, Doctor Fordyce; and
he made me witness what he had written.
He wanted it given to you right off, sir.'"

Doctor Fordyce fancied the book might
be a Testament, as such poor beings some-
times have reverence for early religious in-
structions; but he was mistaken. Sewed
into a covering of strong linen, enveloped
in numerous wrappings of paper—the last
one of which was sealed with red wax—was
a bank-book in the name of William
Atkinson, which proved to be the real name
of poor old Ransey Sniffles. He was a miser.

When Doctor Fordyce had purchased a
city house and commenced city practice,
Mrs. St. Stephens was pleased to consent
to his marriage with her daughter, naming
him to her friends as "our rising young
physician." He and Barbara had their
quiet laugh. But Doctor Fordyce's charity
patient had laid the nucleus of a brilliant
future for both, and everybody continued to
be satisfied.

on reels of about 150 bars to the lineal inch.
You can get an idea of the fineness of the
texture by computing the number of meshes
to the square inch of the cloth. When woven
from reeds of 300 blades to the inch, the
number of meshes would be the square of
the number of blades to the lineal-inch, or
300 times 300, which is 40,000. Each of
these meshes is uniform in size, and the
thread is so fine that each mesh is distinct
even with the naked eye. The cloth is used
in bolting or sieving flour. I do not know
how much a man can weave in a day, but
the quantity must be small. The wages
are about 50 cents a day to weavers while
they are in their prime, a period lasting
about five years. After a man has woven
that long his eyes begin to fail him, and he
is put on a coarser cloth. These changes
continue to be made with him until he is finally
weaving material as coarse as mospelin
netting.

"There is no manufacture of bolting
cloth in this country, and, consequently,
the goods are admitted free of tariff. France
tries to compete with the Zurich manufac-
turers, but her stock is machinery woven
and not so good. Besides the superior
workmanship there is something about the
Swiss silk that makes it better than any
other for our use. The cocoons of Pied-
mont and Verona produce a thread the elas-
ticity of which is so great that it can be
stretched 20 per cent of its length before it
breaks. Silk is a fine, bright, massive fluid
which flows out by two openings under the
worm's mouth and hardens immediately on
being exposed to the air. The spinners put
it on the bobbins in thread as fine as that
which comes from the mouth of the worm.
They draw it taut to reduce the elasticity, and
in its original color of a bright orange it
goes to the weavers. In making the cloth
the moisture of the cellars is an essential
point, because the threads would break if
they became dry and hard. In France
where the weaving is almost wholly by
machinery, the moisture is supplied arti-<

